

**Supplementary Table ST2 (Page 1 of 4)**

LMN ProbesetId	GeneTitle	Gene Symbol	MDD/CTRL (air)	Wilcox P_value	Paired t-test p-value	RIM p-value	Non-suicide MDD Subjects (air)	Suicide-MDD Subjects (air)	Antidepressant-Free MDD Subjects (air)	Antidepressant-Treated-MDD Subjects (air)	Pearson Correlation Value with Symptom Score in 21 MDD Subjects	Fix effect in UCMS mice (air)	Fix effect in UCMS mice (p-value)	BDNF KOWT mice (ALR)*
1812824	somatostatin	SST	-0.84	0.002	0.002	0.000	-1.16	-0.20	-0.85	-0.84	0.01	-0.19	0.31	-0.49
1807372	adenosine A2a receptor	ADORA2A	0.15	0.009	0.078	0.053	0.10	0.23	0.14	0.15	-0.11	ND	ND	
1770454	agrin	AGRN	0.13	0.076	0.072	0.017	0.17	0.05	0.33	0.05	-0.26	-0.04	0.63	
1763461	aldehyde dehydrogenase 7 family, member A1	ALDH7A1	0.13	0.366	0.224	0.031	0.24	-0.11	-0.04	0.19	0.16	ND	ND	0.49
1698159	ankyrin repeat domain 6	ANKRD6	0.08	0.056	0.085	0.020	-0.09	-0.05	-0.04	-0.09	0.14	-0.05	0.67	0.08
1711120	activity-regulated cytoskeleton-associated protein	ARC	0.11	0.251	0.212	0.042	0.11	0.11	0.14	0.10	0.29	0.42	0.12	-0.91
1672161	cyclic AMP-regulated phosphoprotein, 21 kD, transcript variant 1	ARPP-21	-0.10	0.404	0.217	0.044	-0.15	0.02	-0.04	-0.12	0.00	ND	ND	
1654118	BCL2-like 1, nuclear gene encoding mitochondrial protein, transcript variant 1	BCL2L1	0.20	0.005	0.003	0.000	0.25	0.12	0.17	0.22	0.16	0.20	0.35	
1746561	BCL2-like 2 (BCL2L2), mRNA.	BCL2L2	0.08	0.211	0.144	0.026	0.12	0.01	0.02	0.11	0.05	0.00	0.97	
1662184	chromosome 5 open reading frame 34	C5orf34	-0.10	0.131	0.073	0.030	-0.12	-0.03	-0.08	-0.10	0.07	ND	ND	
1748840	calbindin 2, 29kDa (calretinin), transcript variant CALB2c	CALB2	-0.24	0.031	0.063	0.189	-0.31	-0.09	-0.32	-0.20	0.35	0.02	0.94	
1730487	caldesmon 1, transcript variant 5	CALD1	0.16	0.050	0.036	0.005	0.22	0.04	0.09	0.19	-0.07	ND	ND	0.18
1804339	calcium/calmodulin-dependent protein kinase IG	CAMK1G	-0.10	0.224	0.093	0.007	-0.34	0.08	-0.54	-0.06	-0.18	0.04	0.81	-0.69
2319544	calcium/calmodulin-dependent protein kinase II delta transcript variant 2	CAMK2D	-0.22	0.022	0.014	0.001	-0.32	-0.01	-0.13	-0.25	-0.05	0.14	0.09	

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1743021	calcium/calmodulin-dependent protein kinase kinase 2, beta, transcript variant 4	CAMKK2	0.15	0.255	0.304	0.006	0.36	-0.27	0.41	0.05	0.16	0.05	0.81	
1658835	caveolin 2 (CAV2), transcript variant 1, mRNA.	CAV2	0.09	0.089	0.069	0.006	0.08	0.09	-0.05	0.14	-0.17	ND	ND	
1669410	chromogranin A (parathyroid secretory protein 1)	CHGA	-0.27	0.040	0.031	0.000	-0.42	0.03	-0.05	-0.36	-0.06	-0.05	0.79	0.26
1803147	crumbs homolog 1 (Drosophila) (CRB1), transcript variant 1, mRNA.	CRB1	0.06	0.187	0.135	0.006	0.10	-0.03	0.02	0.08	0.06	ND	ND	
2334243	cAMP responsive element binding protein 1, transcript variant A,	CREB1	0.13	0.089	0.137	0.007	0.20	-0.01	0.30	0.06	-0.08	0.00	0.98	
2334242	cAMP responsive element binding protein 1, transcript variant A	CREB1	0.33	0.061	0.066	0.004	0.52	-0.06	0.35	0.32	0.17	ND	ND	
1808707	fascin homolog 1, actin-bundling protein (Strongylocentrotus purpuratus)	FSCN1	-0.11	0.237	0.196	0.043	-0.17	0.01	0.21	-0.24	-0.22	0.11	0.53	-0.32
1802633	gamma-aminobutyric acid A receptor, alpha 1	GABRA1	-0.33	0.076	0.100	0.019	-0.44	-0.13	-0.23	-0.38	-0.09	ND	ND	
1707571	gamma-aminobutyric acid A receptor, alpha 5	GABRA5	-0.16	0.211	0.339	0.047	-0.21	-0.06	-0.51	-0.02	0.25	ND	ND	
2292646	glutamate decarboxylase 1, transcript variant GAD67	GAD1	-0.22	0.061	0.064	0.004	-0.35	0.03	-0.35	-0.17	-0.03	-0.11	0.37	
1728301	glutamate decarboxylase 2	GAD2	-0.27	0.029	0.039	0.006	-0.38	-0.06	-0.47	-0.19	0.11	ND	ND	
1794552	growth associated protein 43 (GAP43), mRNA.	GAP43	0.09	0.187	0.204	0.041	0.08	0.09	0.17	0.05	-0.11	-0.05	0.66	

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2373515	heat shock protein 90kDa alpha (cytosolic), class A member 1 transcript variant 2	HSP90AA1	0.06	0.366	0.326	0.012	-0.14	0.14	-0.05	-0.05	-0.21	0.02	0.88	
2371079	5-hydroxytryptamine receptor 3A, transcript variant 2	HTR3A	-0.19	0.089	0.041	0.037	-0.25	-0.06	-0.46	-0.08	0.11	-0.06	0.65	
1680434	mitogen-activated protein kinase 8 interacting protein 1	MAPK8IP1	0.13	0.110	0.071	0.018	0.13	0.13	0.05	0.16	0.09	0.14	0.13	
2398939	myelin basic protein, transcript variant 3	MBP	0.59	0.010	0.008	0.069	0.81	0.15	0.60	0.58	0.10	-0.09	0.55	-0.04
1731062	neuropeptide Y	NPY	-0.52	0.018	0.009	0.000	-0.74	-0.08	-0.38	-0.58	0.05	-0.13	0.68	-0.39
1693334	procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha polypeptide I, transcript variant 1	P4HA1	0.10	0.102	0.097	0.009	0.20	-0.08	0.16	0.09	-0.36	0.07	0.59	-0.45
1738095	period homolog 2 (Drosophila)	PER2	0.03	1.000	0.788	0.048	-0.27	0.45	0.11	-0.09	-0.29	0.20	0.14	-0.67
1800642	reelin, transcript variant 2	RELN	-0.22	0.029	0.071	0.013	-0.27	-0.13	-0.49	-0.12	0.06	-0.12	0.60	
1753005	reelin, transcript variant 1	RELN	-0.16	0.065	0.038	0.120	-0.18	-0.11	-0.21	-0.13	0.13	ND	ND	
1758067	regulator of G-protein signalling 4	RGS4	-0.47	0.012	0.009	0.001	-0.57	-0.27	-0.88	-0.30	0.10	0.18	0.35	-0.35
1728298	SH3-binding domain kinase 1	SBK1	-0.10	0.048	0.071	0.115	-0.15	0.01	-0.03	-0.12	-0.09	0.07	0.48	-0.43
2156936	saccharopine dehydrogenase	SCCPDH	-0.15	0.048	0.030	0.033	-0.18	-0.09	-0.18	-0.14	-0.14	-0.06	0.73	
2408080	synaptosomal-associated protein, 25kDa, transcript variant 2	SNAP25	-0.44	0.118	0.048	0.004	-0.68	0.02	-0.48	-0.43	0.09	ND	ND	

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2060115	sortilin-related receptor, L(DLR class) A repeats-containing	SORL1	0.14	0.135	0.090	0.000	0.15	0.14	0.21	0.12	0.08	-0.21	0.14	
1783837	synapsin I, transcript variant la	SYN1	-0.12	0.224	0.206	0.045	-0.16	-0.03	-0.31	-0.04	-0.08	-0.07	0.47	
1781060	synapsin II, transcript variant lia	SYN2	-0.21	0.211	0.124	0.036	-0.24	-0.15	0.03	-0.31	-0.06	-0.02	0.92	0.33
1701483	synaptophysin	SYP	-0.19	0.061	0.045	0.117	-0.20	-0.18	-0.10	-0.23	0.15	0.02	0.76	
2384409	tachykinin, precursor 1, transcript variant alpha	TAC1	-0.38	0.018	0.018	0.002	-0.42	-0.31	-0.50	-0.34	0.19	0.21	0.67	-0.86
2342541	tachykinin, precursor 1, transcript variant beta	TAC1	-0.35	0.052	0.041	0.017	-0.34	-0.36	-0.47	-0.30	0.20	ND	ND	-0.86
1790270	tachykinin, precursor 1, transcript variant gamma, mRNA.	TAC1	-0.20	0.014	0.025	0.193	-0.16	-0.29	-0.35	-0.14	0.28	ND	ND	-0.86
1737535	TAF4 RNA polymerase II, (TBP)-associated factor,	TAF4	0.09	0.048	0.085	0.016	0.11	0.06	0.09	0.09	-0.03	ND	ND	
1725183	tubulin folding cofactor E, transcript variant 1	TBCE	-0.13	0.056	0.036	0.002	-0.17	-0.03	-0.14	-0.12	-0.08	ND	ND	0.01
1750961	transmembrane 6 superfamily member 1	TM6SF1	-0.14	0.037	0.127	0.021	-0.20	-0.03	-0.27	-0.09	0.17	ND	ND	0.2
1812392	thymosin beta 10	TMSB10	-0.17	0.061	0.053	0.006	-0.22	-0.07	-0.30	-0.12	0.01	0.07	0.52	0.27
1683120	uracil-DNA glycosylase (UNG), transcript variant 1, mRNA.	UNG	0.16	0.135	0.068	0.017	0.20	0.06	0.05	0.20	-0.06	0.06	0.53	
1757497	VGF nerve growth factor inducible	VGF	-0.17	0.144	0.077	0.012	-0.26	0.01	-0.08	-0.21	-0.09	-0.08	0.70	

ND: not detectable

\* Values obtained from  
Glorioso et al., 2006